

EXHIBIT B

STATEMENT OF WORK

BATTLE CREEK WATERSHED STEWARDSHIP, PHASE 2

1. Scope of the project

This AFRP project will be administered by the Battle Creek Watershed Conservancy [Conservancy]. Project tasks will be performed by the Conservancy's watershed coordinator; its subcontractors, Kier Associates and Terraqua, Inc.; and its board of directors. The Conservancy's personnel, subcontractors, and board will work on the project in close coordination with the Service's Red Bluff Fish and Wildlife Office and other responsible resource agencies.

The specific objectives of the project are:

1. Conduct an assessment of conditions in the watershed, primarily for identifying and quantifying sites and management practices that can be remediated or improved to reduce adverse impacts on the Restoration Project.

2. Implement, in close cooperation with the resource agencies and local schools, a watershed information system to assist the Restoration Project's monitoring, assessment, and adaptive management activities. The system will include an updating of the KRIS Battle Creek watershed information management program developed to support the 1999 Battle Creek Salmon and Steelhead Restoration Plan.

3. Sustain implementation of the Watershed Strategy, through outreach by the Conservancy's board of directors and watershed coordinator to the area's schools and communities, agencies and landowners.

2. Justification and benefits of the project

The Restoration Project is based on a thorough analysis of Battle Creek stream habitat data collected over a period of several years by the California Department of Fish and Game and published by the Battle Creek Working Group as the *Battle Creek Salmon and Steelhead Restoration Plan* [Ward and Kier, 1999]. The data strongly suggests the need to improve management activities in the watershed to assure the realization of the projected benefits of the \$50 million CALFED Battle Creek Salmon and Steelhead Restoration Project.

The principle target species of the Restoration Project, winter-run and spring-run chinook salmon and steelhead, are those whose life history strategies include substantial reliance on high-quality summer stream habitat. Past watershed management activities have diminished riparian vegetation and released substantial amounts of sediment into the basin's tributaries, caused stream broadening, pool shallowing, and water temperature increases. Sediment-producing sites need to be stabilized and riparian corridors in key stream reaches need to be re-vegetated. The need for these restoration measures must be clearly documented in the field, interpreted, and discussed to the satisfaction of the basin's landowners.

Many of the basin's landowners are familiar with the way in which the Battle Creek Working Group used the KRIS [Klamath Resource Information System] watershed integration tool for capturing and interpreting the data from CDFG, PG&E, and elsewhere in the 1999 *Restoration Plan*. The updating of the 1999 version of KRIS/Battle Creek and the incorporation of the new watershed assessment information into the program will assure that the basin's landowners are presented information about present conditions and the affects of management practices in ways that make sense to them and upon which they can agree upon stabilization and restoration priorities.

Battle Creek Watershed Conservancy's on-going outreach efforts, including the wide circulation of its *Battle Creek Watershed News*, will further strengthen the dissemination of information concerning present conditions in the basin and the upslope and riparian restoration measures which must be undertaken to assure the realization of the full projected benefits of the CALFED Battle Creek Salmon and Steelhead Restoration Project.

3. Monitoring and Data Collection Information

Data will be collected as part of the Watershed Assessment under Task 1. Final sampling protocols for Task 1.3 and 1.4 will conform to protocols and methodology used by the California Resources Agency's North Coast Watershed Assessment Program, the only officially recognized methodology for assessing watersheds within the state of California, unless those methods need to be modified for local conditions in Battle Creek. Stream reaches to be sampled will conform to Environmental Protection Agency spatial systematic sampling designs which have been adopted as best practices for allocating sampling efforts across geographic scales.

The final watershed assessment report will include recommendations for monitoring watershed conditions, including a schedule for future monitoring and follow-up watershed assessments.

4. Work To Be Performed and Deliverables

Summary description of the tasks, deliverables, timeframes, and costs

The tasks, project deliverables, target dates, and costs by subtasks are provided in Table 1 to Table 3. Target completion dates will be dependent on the date of contract initiation.

Table 1. Task 1 subtasks, deliverables, timeframes, costs.

<u>Completion Date</u>	Task 1. Conduct Watershed Assessment in the upper, middle, and lower Battle Creek watershed reaches to identify significant sediment sources, other environmentally sensitive areas, necessary measures, priorities, estimated treatment costs, and to seek treatment funds.	<u>Deliverable Watershed Assessment</u>	<u>Budget</u> \$137,772
month 1, continuing	0.1 Confer with interested watershed landowners to explain the need for, and to plan Task 1 measures. Maintain contact with landowners throughout the course of the task.	Task plan	\$5,440
month 15	0.2 Identify, evaluate, and prioritize for treatment significant sediment sources on Sierra Pacific Industries' lands.	Company plan	\$0 [\$75000 match value]
month 15	0.3 Identify, evaluate and prioritize for treatment significant sediment sources on the lands of cooperating private landowners other than those owned and managed by Sierra Pacific Industries, giving priority to the upper and middle reaches of the north and south forks of Battle Creek.	Draft rpt	\$61,380
month 16	0.4 Identify, evaluate and prioritize measures for dealing with other environmentally sensitive areas, including potential land development conflicts, the need for negotiating conservation easements or acquisitions, or other community-based actions in keeping with the Battle Creek Watershed Strategy.	Draft rpt	\$51,880
month 17	0.5 Prepare draft report concerning tasks 1.1 through 1.5 for review by Battle Creek Watershed Conservancy board, cooperating landowners, and interested agencies.	Merged draft rpts	\$9,032
month 19	0.6 Conduct three community workshops to explain purpose, conduct and findings of the draft Watershed Assessment, to promote community-level watershed conservation education and to garner support for implementing the report recommendations.	Public input on the plan	\$4,080
month 20	0.7 Finalize watershed assessment report, making clear the priorities for, and estimated costs of, treating the most significant sources of stream sedimentation in the upper watershed and of taking those other actions identified under task 1.5, in accordance with the Battle Creek Watershed Strategy. Publicize Watershed Assessment recommendations in the <i>Battle Creek Watershed News</i> (see subtask 3.2) and coordinate/share with other in-basin watershed assessment efforts. Pursue funding to implement adopted actions.	Watershed Assessment, treatment plan, funding	\$5,960

Table 2. Task 2 subtasks, deliverables, timeframes, costs.

<u>Completion date</u>	Task 2. Implement watershed information management system in watershed communities, schools and among interested agencies	<u>Deliverable</u> Info system, website, hub	<u>Budget</u> \$91,540
month 3	2.1 Conduct community discussions (3) on availability, use and potential further development of the KRIS/Battle Creek watershed information system which was created to monitor and evaluate progress of the Battle Creek Salmon and Steelhead Restoration Project. Coordinate/share information and methodologies and, to the extent possible, integrate with other in-basin watershed stewardship efforts. Identify individuals, agencies and school teachers interested in using and implementing the system. Encourage the identification of historical materials the community may wish to add to the system's present technical information elements.	Cooperators	\$7,570
month 3	2.2 Acquire and install ArcView software, to enable use of KRIS/Battle Creek map projects in up to three public school locations.	System software	\$13,400
month 4	2.3 Consult with Chico State University Geographic Information Center; determine aerial photography and map layers required to support task 1, watershed assessment, prepare map layers, incorporate in KRIS/Battle Creek system.	Map layers	\$11,840
month 9	2.4 Conduct three community trainings, to include resource agency personnel, in the use of KRIS/Battle Creek.	Training and education	\$8,640
month 12	2.5 Conduct up to three community trainings in basic stream monitoring techniques, including the downloading and use of stream temperature data in the KRIS/Battle Creek system.	Training and education	\$13,080
month 16	2.6 Create a plan for the continued use and maintenance of KRIS /Battle Creek, Including the role to be played by interested State and federal agencies, schools and interested community groups. Create a KRIS/Battle Creek website capable of serving, among other functions, as a watershed community electronic bulletin board.	Maintenance plan, website	\$6,960
Month 19	2.7 Establish a permanent KRIS/Battle Creek "hub" to serve the schools, agencies and community groups interested in gathering and using Battle Creek watershed information, including information concerning implementation of the Battle Creek Salmon and Steelhead Restoration Project, and to train the individuals who shall maintain the hub in how to update data elements and maintain data quality assurance and quality control.	Training, education, system, and system hub	\$30,050

Table 3. Task 3 subtasks, deliverables, timeframes, costs.

<u>Completion date</u>	Task 3. Sustain the implementation of the Battle Creek Watershed Strategy	<u>Deliverable</u> Sustained stewardship program	<u>Budget</u> \$39,505
month 6, continuing	3.1 Sustain community interest in, and focus on, the 1999 <i>Battle Creek Watershed Strategy</i> through public updates on actions carried out pursuant to the <i>Strategy</i>. Convene up to six community meetings to review and, where necessary, revise the <i>Strategy</i> and update the community on the conservancy's broader activities.	Community briefings, updated materials	\$12,640
five quarterly newsletters	3.2 Continue publication of the <i>Battle Creek Watershed News</i>, initiated by the Battle Creek Watershed Conservancy. Create and mail to the updated Battle Creek Watershed Conservancy mailing list eight quarterly newsletters.	Watershed community newsletters, education	\$12,355
month 7, continuing	3.3 Maintain cooperative effort involving classroom watershed education in the communities' schools. Assist classroom teachers and students in the field and computer laboratory training program described in Task 2.4 above.	Watershed conservation education	\$4,625
month 3, continuing	3.4 Continue Battle Creek Watershed Conservancy support for and participation in the Return of the Salmon Festival, Manton Apple Festival and other public events which provide an outreach opportunity to explain and discuss the Battle Creek Salmon and Steelhead Restoration Program: to get community feedback and guidance on the Conservancy's watershed assessment, sediment control, conservation easement, fuel reduction, and invasive plant initiatives; and to demonstrate the usefulness of the KRIS/Battle Creek system for tracking watershed information of interest to the community.	Ten watershed community exhibits, events	\$9,885

5. Project Budget

Table 4. Cost breakdown table.

Project Phase and Task	Direct Labor Hours	Direct Salary and Benefits	General & Admin. and Fee	Service Contracts	Material	Misc. Costs	Totals
1	0	\$0.00	\$12,524.73	\$125,247.27	\$0.00	\$0.00	\$137,772.00
1.1	10	\$0.00	\$494.55	\$4,945.45	\$0.00	\$0.00	\$5,440.00
1.2	20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00 [\$75,000 match value]
1.3	30	\$0.00	\$5,580.00	\$55,800.00	\$0.00	\$0.00	\$61,380.00
1.4	40	\$0.00	\$4,716.36	\$47,163.64	\$0.00	\$0.00	\$51,880.00
1.5	50	\$0.00	\$821.09	\$8,210.91	\$0.00	\$0.00	\$9,032.00
1.6	60	\$0.00	\$370.91	\$3,709.09	\$0.00	\$0.00	\$4,080.00
1.7	70	\$0.00	\$541.82	\$5,418.18	\$0.00	\$0.00	\$5,960.00
Sub Total	0	\$0.00	\$12,524.73	\$125,247.27	\$0.00	\$0.00	\$137,772.00
20		\$0.00	\$8,321.82	\$83,218.18	\$0.00	\$0.00	\$91,540
2.1	10	\$0.00	\$688.18	\$6,881.82	\$0.00	\$0.00	\$7,570
2.2	20	\$0.00	\$1,218.18	\$8,881.82	\$0.00	\$3,300.00	\$13,400
2.3	30	\$0.00	\$1,076.36	\$10,763.64	\$0.00	\$0.00	\$11,840
2.4	40	\$0.00	\$785.45	\$7,854.55	\$0.00	\$0.00	\$8,640
2.5	50	\$0.00	\$1,189.09	\$11,890.91	\$0.00	\$0.00	\$13,080
2.6	60	\$0.00	\$632.73	\$6,327.27	\$0.00	\$0.00	\$6,960
2.7	70	\$0.00	\$2,731.82	\$27,318.18	\$0.00	\$0.00	\$30,050
Sub Total	0	\$0.00	\$8,321.82	\$79,918.18	\$0.00	\$3,300.00	\$91,540.00
30		\$0.00	\$3,591.36	\$33,413.64	\$0.00	\$2,500.00	\$39,505
3.1	10	\$0.00	\$1,149.09	\$10,691.01	\$0.00	\$799.90	\$12,640
3.2	20	\$0.00	\$1,123.18	\$10,449.96	\$0.00	\$781.86	\$12,355
3.3	30	\$0.00	\$420.45	\$3,911.86	\$0.00	\$292.68	\$4,625
3.4	40	\$0.00	\$898.64	\$8,360.81	\$0.00	\$625.55	\$9,885
Sub Total	0	\$0.00	\$3,591.36	\$33,413.64	\$0.00	\$2,500.00	\$39,505.00
Grand Total	0	\$0.00	\$24,437.91	\$238,579.09	\$0.00	\$5,800.00	\$268,817.00

Table 5 Quarterly budget.

Project Phase and Task	Quarterly Budget Jul-Sep 01	Quarterly Budget Oct-Dec 01	Quarterly Budget Jan-Mar 02	Quarterly Budget Apr-Jun 02	Quarterly Budget Jul-Sep 02	Quarterly Budget Oct-Dec 02	Quarterly Budget Jan-Mar 03	Quarterly Budget Jan-Mar 03	Project Total
1	\$8,966.50	\$22,819.50	\$22,819.50	\$22,819.50	\$24,179.50	\$27,759.50	\$3,796.00	\$4,612.00	\$137,772.00
1.1	\$272.00	\$816.00	\$816.00	\$816.00	\$816.00	\$816.00	\$816.00	\$272.00	\$5,440.00
1.2	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1.3	\$4,092.00	\$12,276.00	\$12,276.00	\$12,276.00	\$12,276.00	\$8,184.00	\$0.00	\$0.00	\$61,380.00
1.4	\$3,242.50	\$9,727.50	\$9,727.50	\$9,727.50	\$9,727.50	\$9,727.50	\$0.00	\$0.00	\$51,880.00
1.5	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$9,032.00	\$0.00	\$0.00	\$9,032.00
1.6	\$1,360.00	\$0.00	\$0.00	\$0.00	\$1,360.00	\$0.00	\$0.00	\$1,360.00	\$4,080.00
1.7	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,980.00	\$2,980.00	\$5,960.00
2	\$7,064.91	\$34,951.40	\$11,984.74	\$11,984.74	\$12,584.74	\$8,224.74	\$4,744.74	\$0.00	\$91,540.00
2.1	\$2,523.33	\$5,046.67	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$7,570.00
2.2	\$0.00	\$13,400.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$13,400.00
2.3	\$2,960.00	\$8,880.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$11,840.00
2.4	\$0.00	\$2,880.00	\$2,880.00	\$2,880.00	\$0.00	\$0.00	\$0.00	\$0.00	\$8,640.00
2.5	\$0.00	\$0.00	\$4,360.00	\$4,360.00	\$4,360.00	\$0.00	\$0.00	\$0.00	\$13,080.00
2.6	\$0.00	\$0.00	\$0.00	\$0.00	\$3,480	\$3,480	\$0.00	\$0.00	\$6,960.00
2.7	\$1,581.58	\$4,744.74	\$4,744.74	\$4,744.74	\$4,744.74	\$4,744.74	\$4,744.74	\$0.00	\$30,050.00
3	\$1,502.39	\$9,084.83	\$9,084.83	\$8,570.94	\$4,577.67	\$4,577.67	\$2,106.67	\$0.00	\$39,505.00
3.1	\$0.00	\$2,106.67	\$2,106.67	\$2,106.67	\$2,106.67	\$2,106.67	\$2,106.67	\$0.00	\$12,640.00
3.2	\$0.00	\$2,471.00	\$2,471.00	\$2,471.00	\$2,471.00	\$2,471.00	\$0.00	\$0.00	\$12,355.00
3.3	\$513.89	\$1,541.67	\$1,541.67	\$1,027.78	\$0.00	\$0.00	\$0.00	\$0.00	\$4,625.00
3.4	\$988.50	\$2,965.50	\$2,965.50	\$2,965.50	\$0.00	\$0.00	\$0.00	\$0.00	\$9,885.00

6. References

Ward, M.B. and W.M. Kier 1999. Battle Creek Salmon and Steelhead Restoration Plan. Prepared for the Battle Creek Working Group. Kier Associates. Sausalito, CA. 157 pp.